

On the north side of the interchange with M-102, in the vicinity of Bernhard Street, special ramps would be added to serve the HOV lanes (Figure 3-2). These ramps could cause acquisition of eight residences and one business structure. Additionally, the pedestrian overpass at Bernhard would likely be eliminated further affecting this community.

South of 9 Mile Road and east of John R, there would be special ramps connecting the HOV lanes and service drives at a point east of Highland Avenue (Figure 3-3). North of 9 Mile Road there would be a complementary set of ramps connecting to the service drives. The special ramps south of 9 Mile Road would likely impact seven single-family dwellings. North of 9 Mile Road, 13 businesses structures and a church are likely affected. The special HOV ramps from M-102 north to this point could cost about \$30 million, exclusive of right-of-way.

At I-696, the new HOV ramping would require property acquisition in all four quadrants, as well as the reconstruction of a number of bridges within the interchange (Figure 3-4). About two dozen single-family dwellings would potentially be affected in the southwestern quadrant of this interchange. In the southeastern quadrant, there would likely be one residence and a business structure affected. In the northwest quadrant, five single-family residences and a church could be affected. In the northeast quadrant, there would likely be 12 single-family residences and part of a public school playground impacted. The presence of the school playground would potentially involve a "Section 4(f)" consideration. Section 4(f) of the Transportation Act of 1966 protects public playgrounds, among other cultural and recreational resources.

Due to the complexity of ramp linkages at I-696 and I-75, it would likely be necessary to eliminate overpasses of I-75 that exist today at Shevlin Avenue and at Dallas Avenue. Shevlin is to the south of the interchange and Dallas is to the north. This would affect local traffic circulation and community cohesion. Also, due to the complexity of the interchange, ramp curves would be tighter, and roadway grades steeper than desirable. And, several bridges would be reconstructed. These interchange modifications to provide special HOV treatment would cost \$70 million, exclusive of right-of-way.

Moving north of I-696, another set of special HOV ramps would be located in the 11 Mile Road area which could result in the possible relocation of four business structures, 20 single-family residences, and one institution.

The proposed I-75 project is to include a Single Point Urban Interchange (SPUI) at 12 Mile Road, as well as 14 Mile Road. Figure 3-5 shows a conceptual layout of a SPUI at 12 Mile Road while Figure 3-6 shows the same interchange with special HOV access added. The special ramping would result in an expanded interchange footprint. At 12 Mile Road, with the exception of a church on the east side at Gardenia, the acquisition would likely involve property without structures (e.g., a private parking lot). Likewise, it appears that the special HOV ramps at the 14 Mile Road SPUI would involve property without structures. The cost of special HOV treatment at both proposed SPUIs is estimated to be \$35 million, exclusive of right-of-way.

Moving north, the concept of access to the HOV lanes changes. Rather than trying to accommodate multiple, direct ramp access within the interchange itself, flyover ramps to get from the HOV lanes to the outside of the mainline I-75 would be built in advance of the interchange. An off-ramp example of this treatment is in the area north of Big Beaver Road (Figure 3-7) where high-occupancy vehicles would use the flyover ramp to depart from the HOV lane to gain access to the regular ramp system at each crossroad. The on-ramps would operate in a similar way.







